

AMENDMENTS TO THE CLAIMS

1. (Cancelled)
2. (Cancelled)
3. (Currently amended) A displacement sensor according to claim 1, for automatically extracting a coordinate of a measuring point from an image obtained by using an imaging device according to a prescribed measuring point extraction algorithm, and computing a desired displacement from the automatically extracted measuring point coordinate, characterized by that:  
the sensor further comprises display data editing means for editing at least part of data used from the time of obtaining the image until the time of computing the displacement for use as display data for an image monitor, and  
wherein the display data for the image monitor comprises a raw image obtained by the imaging device.
4. (Original) A displacement sensor according to claim 3, wherein the display data for the image monitor further comprises a graphic image indicating a measuring point coordinate which is shown in association with the raw image.
5. (Original) A displacement sensor according to claim 3, wherein the display data for the image monitor further comprises a graphic image indicating a tolerance range for a measurement value in a direction for measuring the displacement which is shown in association with the raw image.
6. (Original) A displacement sensor according to claim 3, wherein the display data for the image monitor further comprises a graphic image indicating a measuring point coordinate and a tolerance range for a measurement value in a direction for measuring the displacement which are shown in association with the raw image.
7. (Original) A displacement sensor according to claim 3, wherein the editing means is adapted to enlarge an image based on the display data in the direction for displacement measurement.

8. (Currently amended) A displacement sensor according to claim 1, for automatically extracting a coordinate of a measuring point from an image obtained by using an imaging device according to a prescribed measuring point extraction algorithm, and computing a desired displacement from the automatically extracted measuring point coordinate, characterized by that:

the sensor further comprises display data editing means for editing at least part of data used from the time of obtaining the image until the time of computing the displacement for use as display data for an image monitor, and

wherein the display data comprises an image of a line bright waveform obtained from a raw image.

9. (Original) A displacement sensor according to claim 8, wherein the display data further comprises a graphic image indicating a measuring point coordinate shown in association with the line bright waveform.

10. (Original) A displacement sensor according to claim 8, wherein the display data further comprises a graphic image indicating a threshold level for extracting the measuring point coordinate shown in association with the line bright waveform.

11. (Original) A displacement sensor according to claim 8, wherein the display data further comprises a graphic image indicating a tolerance range for a measurement value in a direction for measuring the displacement which is shown in association with the line bright waveform.

12. (Original) A displacement sensor according to claim 8, wherein the display data further comprises a graphic image indicating a measuring point coordinate and a tolerance range for a measurement value in a direction for measuring the displacement which is shown in association with the line bright waveform.

13. (Original) A displacement sensor according to claim 8, wherein the editing means is adapted to enlarge an image based on the display data in the direction for displacement measurement.

14. (Currently amended) A displacement sensor according to claim 1, for automatically extracting a coordinate of a measuring point from an image obtained by using an imaging device according to a prescribed measuring point extraction algorithm, and computing a desired displacement from the automatically extracted measuring point coordinate, characterized by that:

the sensor further comprises display data editing means for editing at least part of data used from the time of obtaining the image until the time of computing the displacement for use as display data for an image monitor, and

wherein the display data for the image monitor comprises a raw image obtained from the imaging device and a line bright waveform obtained from the raw image for display on a monitor in a prescribed relationship.

15. (Original) A displacement sensor according to claim 14, wherein the display data further comprises a graphic image indicating a measuring point coordinate shown in association with the raw image and/or the line bright waveform.

16. (Original) A displacement sensor according to claim 14, wherein the display data further comprises a graphic image indicating a tolerance range for a measurement value in a direction for measuring the displacement shown in association with the raw image and/or the line bright waveform.

17. (Original) A displacement sensor according to claim 14, wherein the display data further comprises a graphic image indicating a measuring point coordinate and a tolerance range for a measurement value in a direction for measuring the displacement in association with the raw image and/or the line bright waveform.

18. (Original) A displacement sensor according to claim 14, wherein the editing means is adapted to enlarge an image based on the display data in the direction for displacement measurement.

19. (Original) A displacement sensor according to claim 3, wherein the display data further comprises a graphic image indicating a measuring point extracting range defined in a direction perpendicular to the direction of displacement measurement which is shown in association with the raw image.

20. (Original) A displacement sensor according to claim 3, wherein the display data further comprises a graphic image indicating a measuring point extracting range defined in a direction perpendicular to the direction of displacement measurement and an automatically extracted measuring point coordinate which is shown in association with the raw image.
21. (Currently amended) A displacement sensor according to claim 1, for automatically extracting a coordinate of a measuring point from an image obtained by using an imaging device according to a prescribed measuring point extraction algorithm, and computing a desired displacement from the automatically extracted measuring point coordinate, characterized by that:  
the sensor further comprises display data editing means for editing at least part of data used from the time of obtaining the image until the time of computing the displacement for use as display data for an image monitor, and  
wherein the display data comprises a trend graph image showing a plurality of computed displacements in a time sequence.
22. (Cancelled)
23. (Cancelled)
24. (Cancelled)
25. (Cancelled)
26. (Cancelled)
27. (Cancelled)
28. (Cancelled)